Integration

Unit B

Integrating Word, Excel, and Access

Objectives

- Merge data between Access and Word
- Use Mail Merge to create a form letter
- Export an Access table to Excel

You have learned how to use Word, Excel, and Access individually to accomplish specific tasks more efficiently. Now you will learn how to integrate files created with these programs so that you can use the best features of each one. Maria Abbott, the general sales manager for MediaLoft, wants to establish a profile of MediaLoft's corporate customers so that she can incorporate this information into the annual report. To do this, she creates a survey and mails it to these customers. She also wants to export the Access database of corporate customer names and addresses to an Excel worksheet so that she can create an Excel chart showing corporate sales by state and include this chart in the report.

Unit B
Integration

Merging Data Between Access and Word

Companies often keep a database of customer names and addresses, which they use to send form letters to their customers. With Office, you can combine, or **merge**, data from an existing Access table with a Word document to automatically create personalized form letters. Maria wants to survey MediaLoft's corporate customers. She has written a form letter using Word, and she wants to merge her form letter with the customer names and addresses that already exist in an Access table.

Steps 1 2 3 4

QuickTip

If you plan to do the steps in this unit again, be sure to make and use a copy of the Access file MediaLoft-IB.

1. Start Access, open the file **MediaLoft-IB.mdb** from the location where your Project Files are stored, click the **Tables button** on the Objects bar if necessary, make sure **Customers** is selected, then click the **Open button** on the Database window toolbar
   The datasheet for the Customers table opens. The Customers table is the **data source** for the mail merge.

2. Click **Tools** on the menu bar, point to **Office Links**, then click **Merge It with Microsoft Word**
   The Microsoft Word Mail Merge Wizard dialog box opens, as shown in Figure B-1. The Mail Merge Wizard links your data to a Microsoft Word document. The customer survey form letter already exists as a Word document, so the default option, Link your data to an existing Microsoft Word document, is correct.

3. Click **OK**
   The Select Microsoft Word Document dialog box opens.

Trouble?

If the Access window remains on top as the active window, click the Word program button on the taskbar.

4. Select the file **INT B-1.doc** from the location where your Project Files are stored, then click **Open**
   Word opens and the document INT B-1 appears in the document window.

5. If the Word program window does not fill the screen, click the Word program window **Maximize button**, then if necessary, click the **Show/Hide ¶ button** on the Standard toolbar to display formatting marks
   Compare your screen to Figure B-2. The Mail Merge task pane is open. The Mail Merge task pane contains hyperlinks to commands that you use to perform a mail merge. The Mail Merge task pane is organized like a wizard, so there are actually six different Mail Merge task panes. This one is Step 3 of 6. The Mail Merge toolbar appears below the Formatting toolbar. The buttons on the Mail Merge toolbar are used to perform many of the same commands as the hyperlinks in the Mail Merge task pane. The document you just opened is the **main document** for the mail merge.

6. Replace Maria Abbott's name with **Your Name**

7. Save the document as **Survey Form Letter** to the drive and location where your Project Files are stored

FIGURE B-1: Microsoft Word Mail Merge Wizard dialog box

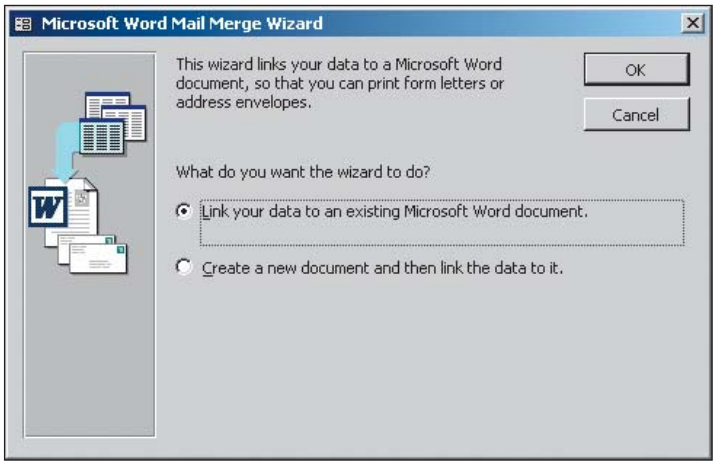


FIGURE B-2: Main document

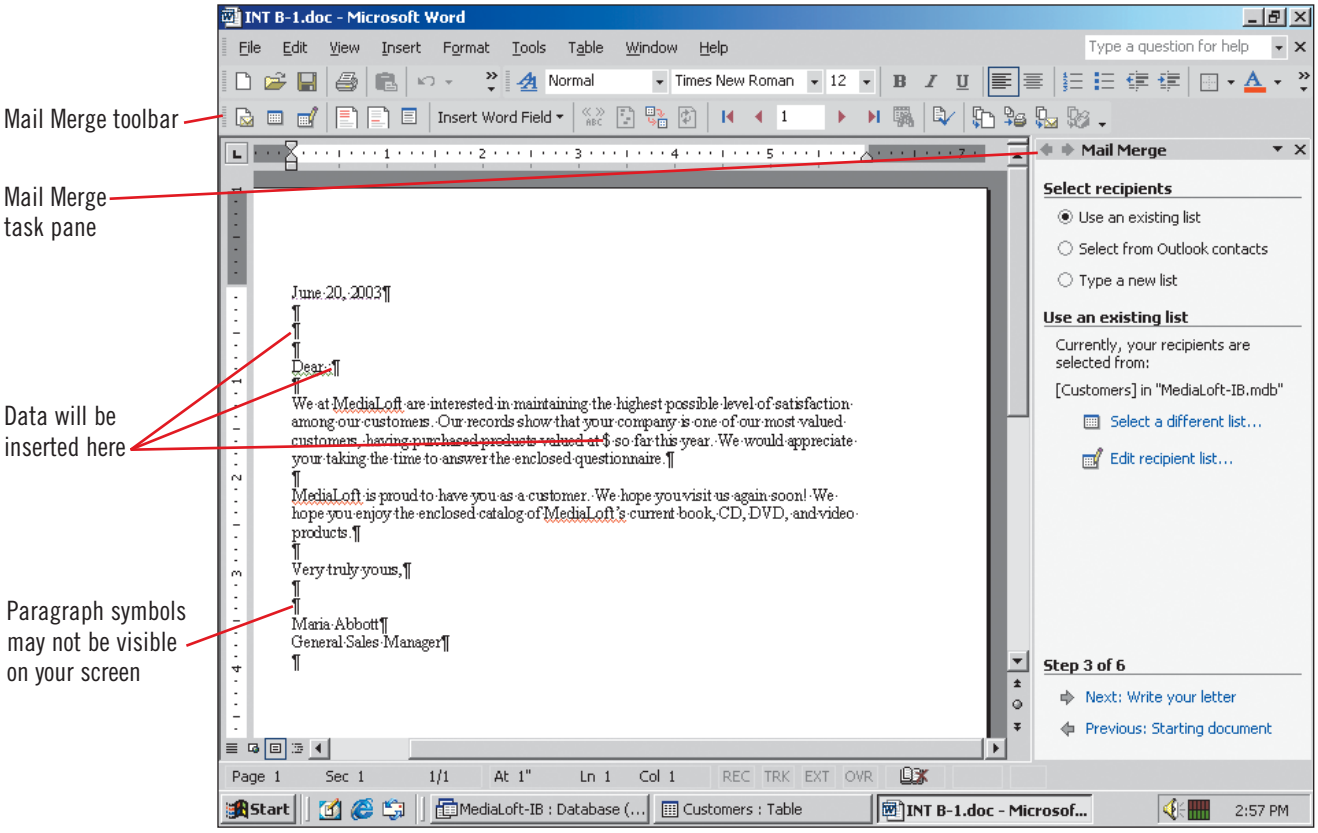


TABLE B-1: Mail Merge buttons

name	button	name	button	name	button
	Insert Address Block		Highlight Merge Fields		Find Entry
	Insert Greeting Line		Match Fields		Check for Errors
	Insert Merge Fields		First Record		Merge to New Document
	View Merged Data		Last Record		Merge to Printer

Using Mail Merge to Create a Form Letter

Once you have opened and linked the form letter and the Access table, you are ready to insert **merge fields**, placeholders for the merged data, into the letter. When you perform the mail merge, Access looks for the merge fields in the main document and replaces them with the appropriate fields from the data source. After opening the data source and selecting the main document, Maria needs to insert merge fields into the main document.

Steps 1 2 3 4

1. Click the **Next: Write your letter hyperlink** in the task pane, click to the **left of the colon** in the greeting, then click the **More items hyperlink** in the Mail Merge task pane
   The Insert Merge Field dialog box opens. This dialog box contains a list of fields in the Access database. You need to insert the field representing each customer's first name.

QuickTip
Click the Highlight Merge Fields button on the Mail Merge toolbar to highlight the merge fields.

2. Click **First**, click **Insert**, click **Close**, position the pointer to the right of the **$** (dollar sign) in the first paragraph, click the **More items hyperlink** in the Mail Merge task pane, click **YTDSales**, click **Insert**, then click **Close**
   The First and the YTDSales fields are inserted between angled brackets in the form letter.
3. Position the insertion pointer in the **second empty paragraph** below the date, then click the **Address block hyperlink** in the Mail Merge task pane
   The Insert Address Block dialog box opens. You use this dialog box to determine the appearance of information in the address block.
4. Click **Joshua Randall Jr.** in the recipient's name format list, then click **Match Fields**
   The Match Fields dialog box opens, similar to Figure B-3. If the field names in the data source you are using approximately match the field names in the Match Fields list on the left, the corresponding field name from your data source will be listed in the drop-down lists on the right side of the dialog box. The Mail Merge field name "Address 1" wasn't matched with anything in the MediaLoft-IB database.
5. Click the **Address 1 list arrow**, click **Street**, compare your settings to Figure B-3, click **OK**, then click **OK** to close the Insert Address Block dialog box
   The Address Block field appears in the document, as shown in Figure B-4.

QuickTip
Click the Edit recipient list hyperlink to open Access and edit the database. Click Exclude this recipient to exclude the current record from the final mail merge.

6. Click the **Next: Preview your letters hyperlink** in the Mail Merge task pane
   The data from the first record (David Friedrichsen at Sprint) appears correctly in the main document.
7. Click the **Next Record button** >> in the task pane
   The data from the second record (Liz Douglas at KGSM) appears in the document. Maria decides to merge the letters into one file so she can examine the final product before printing.

QuickTip
To merge the files directly to the printer, click the Print hyperlink in the task pane.

8. Click the **Next: Complete the merge hyperlink** in the task pane, click the **Edit individual letters hyperlink** in the task pane, then click **OK** in the Merge to New Document dialog box
9. Click the **Save button** on the Standard toolbar, save the document as **Survey Letters** to the location where your Project Files are stored, click **File** on the menu bar, click **Print**, click the **Current page option button** to print only the first form letter, then click **OK**
   The first form letter prints.
10. Click **File** on the menu bar, click **Exit**, then click **No** to save changes to Survey Form Letter
    Word closes and returns you to Access.

FIGURE B-3: Match Fields dialog box

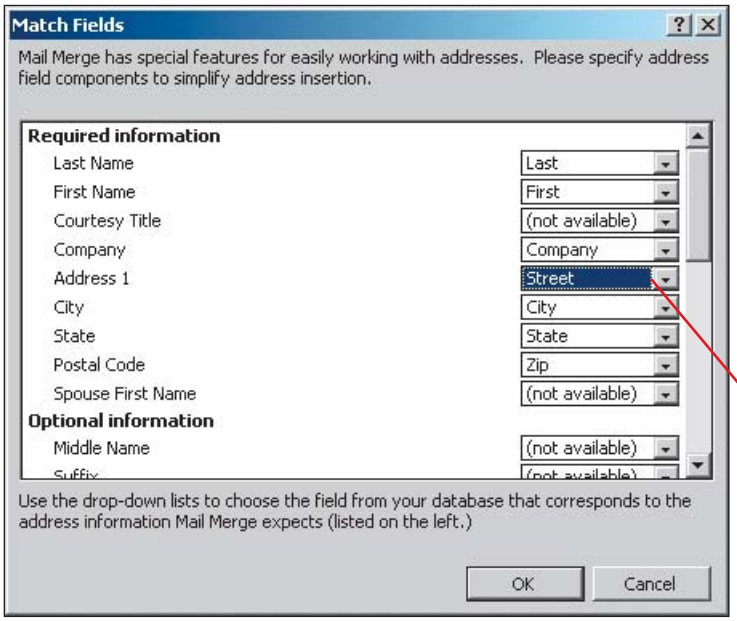
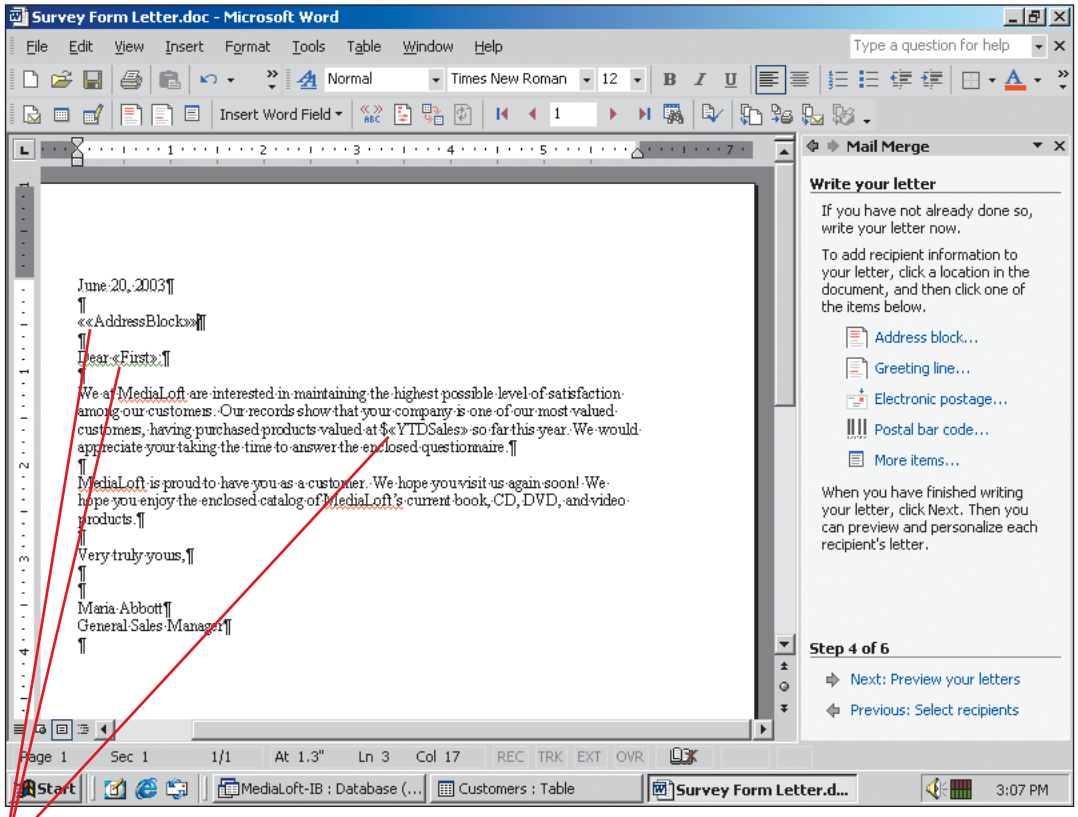


FIGURE B-4: Main document with merge fields inserted



Unit B
Integration

Exporting an Access Table to Excel

You can export data in an Access table to Excel and several other Office programs. When you export a table, a copy of the data is created in a format acceptable to the other program, and the original data remains intact. Maria wants to export the Customers table in the MediaLoft-IB database into Excel so that she can analyze the data. At some point, she will create a chart that shows the distribution of MediaLoft's corporate customer sales.

Steps 1 2 3 4

1. Make sure that the Customers table datasheet is still open, click **Tools** on the menu bar, point to **Office Links**, then click **Analyze It with Microsoft Excel**
   The exported data appears in an Excel workbook named Customers that contains only one worksheet, also named Customers. When you import data into Excel, only one worksheet is supplied, although you can add more.
2. If necessary, click the Excel program window **Maximize button**
   Maria does not need the Phone, Fax, Birthdate, or E-mail columns.
3. Scroll to the right, select the **I through L column selector buttons**, click **Edit** on the menu bar, click **Delete**, then press **[Ctrl][Home]** to return to cell A1
   All the remaining columns are now visible on the screen.
4. Click **Data** on the menu bar, then click **Sort**
   The Sort dialog box opens, similar to Figure B-5. Notice that the Header row option button at the bottom of the dialog box is selected. This means that the first row in the worksheet will not be sorted.
5. Click the **Sort by list arrow**, scroll down and click **State**, click the first **Then by list arrow**, scroll down and click **YTDSales**
   Compare your dialog box to Figure B-5.
6. Click **OK**
   The data is now sorted in ascending order by state, and within each state, by year-to-date sales. Compare your screen to Figure B-6.
7. Click **File** on the menu bar, click **Page Setup**, click the **Page tab** if necessary, click the **Landscape option button**, click **Print**, then click **OK**
   The worksheet prints on one page.
8. Scroll down and enter **Your Name** in **cell A30**, press **[Ctrl][Home]**, click **File** on the menu bar, click **Save As**, switch to the drive and folder where you are saving your Project Files, then click **Save**
   Your changes are saved to the file Customers in the location where your Project Files are stored.
9. Click **File** on the menu bar, click **Exit** to exit Excel, in the Access program window, click **File** on the menu bar, then click **Exit** to exit Access

QuickTip

The green triangle in the upper-left corner of the cells in column H is an error indicator. In this case, it appears because the Zip code appears to be a number, but it is formatted as text. You can ignore it.

FIGURE B-5: Sort dialog box

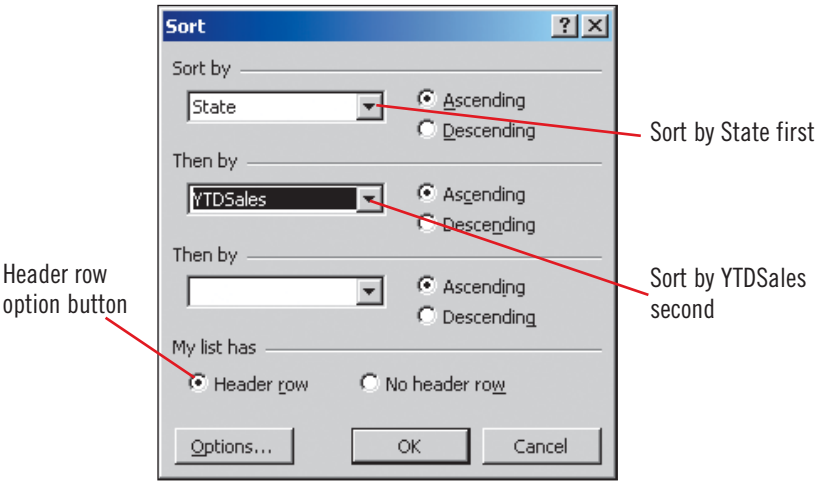
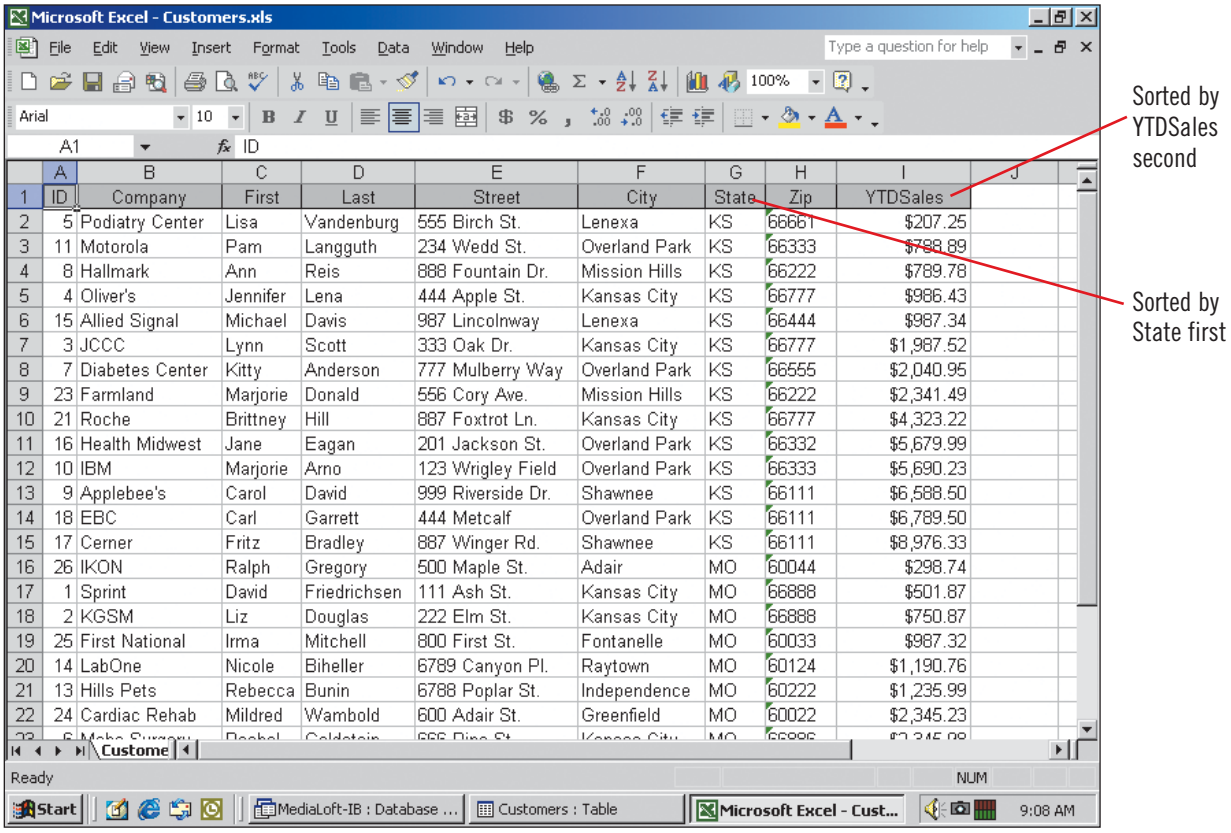


FIGURE B-6: Excel worksheet with sorted data



ID	Company	First	Last	Street	City	State	Zip	YTDSales
5	Podiatry Center	Lisa	Vandenburg	555 Birch St.	Lenexa	KS	66661	$207.25
11	Motorola	Pam	Langguth	234 Wedd St.	Overland Park	KS	66333	$788.89
8	Hallmark	Ann	Reis	888 Fountain Dr.	Mission Hills	KS	66222	$789.78
4	Oliver's	Jennifer	Lena	444 Apple St.	Kansas City	KS	66777	$986.43
15	Allied Signal	Michael	Davis	987 Lincolnway	Lenexa	KS	66444	$987.34
3	JCCC	Lynn	Scott	333 Oak Dr.	Kansas City	KS	66777	$1,987.52
7	Diabetes Center	Kitty	Anderson	777 Mulberry Way	Overland Park	KS	66555	$2,040.95
23	Farmland	Marjorie	Donald	556 Cory Ave.	Mission Hills	KS	66222	$2,341.49
21	Roche	Brittney	Hill	887 Foxtrot Ln.	Kansas City	KS	66777	$4,323.22
16	Health Midwest	Jane	Eagan	201 Jackson St.	Overland Park	KS	66332	$5,679.99
10	IBM	Marjorie	Arno	123 Wrigley Field	Overland Park	KS	66333	$5,690.23
9	Applebee's	Carol	David	999 Riverside Dr.	Shawnee	KS	66111	$6,588.50
18	EBC	Carl	Garrett	444 Metcalf	Overland Park	KS	66111	$6,789.50
17	Cerner	Fritz	Bradley	887 Winger Rd.	Shawnee	KS	66111	$8,976.33
26	IKON	Ralph	Gregory	500 Maple St.	Adair	MO	60044	$298.74
1	Sprint	David	Friedrichsen	111 Ash St.	Kansas City	MO	66888	$501.87
2	KGSM	Liz	Douglas	222 Elm St.	Kansas City	MO	66888	$750.87
25	First National	Irma	Mitchell	800 First St.	Fontanelle	MO	60033	$987.32
14	LabOne	Nicole	Biheller	6789 Canyon Pl.	Raytown	MO	60124	$1,190.76
13	Hills Pets	Rebecca	Bunin	6788 Poplar St.	Independence	MO	60222	$1,235.99
24	Cardiac Rehab	Mildred	Wambold	600 Adair St.	Greenfield	MO	60022	$2,345.23

Exporting an Access table to Word

You can export an Access table to Microsoft Word by using the Publish It with MS Word feature. To export a table, open the Access database with the table you want to export, select the table name or open the table datasheet, click Tools on the menu bar, point to Office Links, then click Publish It with Microsoft Word. The table is exported to a Word table in a new Word document, and the document file is automatically saved in rich text format with the same name as the Access table.

Independent Challenge 1

As the administrator for Monroe High School, you want to keep track of student records and generate reports for the principal and school district. You need to create a database containing information about the students currently enrolled in the high school. Once the database table is complete, export the table information to Excel and Word to create reports.

a. Start Access and create a new database called **Student Records**.
b. Create a table called **Student Info**. Decide what fields should be included in the database, but make sure you include fields for each student's first name, last name, address, phone number, gender, birth date, grade level, and cumulative grade point average (GPA).
c. Create a form to facilitate the entry of your student records, then print one record to show a sample of the form.
d. Add 20 records to your table, then sort the students by last name and then by first name.
e. Export the Student Info table to an Excel worksheet, then resize the columns to fit the table.
f. Scroll down to row C23 and enter **Your Name** in cell 23.
g. Print out your results, then save your worksheet as **Student Info** to the location where your Project Files are stored. Close the worksheet and exit Excel.
h. In Access, use the Publish It with MSWord command to export the Student Info table to a Word table, resize columns to fit the table, then format the table to make the document more attractive.
i. Change the page orientation to Landscape, sort the table by grade level and then by last name, then format the table to make the document more attractive.
j. Press [Enter] twice at the bottom of the document, then type your name.
k. Save the **Student Info** document in the location where your Project Files are stored, print it, close the document, then exit Word.
l. Close the Student Records database and exit Access.

Independent Challenge 2

MediaLoft sponsors the Pleasantown Players, a regional theater group that is supported by ticket revenues and private donations. You have been asked to help the theater group by writing a fundraising letter and merging it with a database of selected MediaLoft corporate customers. To maximize your results, you decide to send out the initial mailing to customers who have spent more than $2,000 at MediaLoft so far this year. You need to modify the current Customers table and create a query to find the appropriate customers. Then you need to create a form letter, which you will merge with the data stored in the query.

a. Open the Project File MediaLoft-IB.mdb from the location where your Project Files are stored, create a query called **Highest Revenue Listing** to find corporate customers who have spent more than $2,000 at MediaLoft so far this year. You are going to merge this query with a form letter, so make sure you include all the fields you will merge into the letter in the query.
b. Create a main document (form letter) in Word called **Funding Letter** in the location where your Project Files are stored. Use all the fields you feel are necessary. In the letter, you want to tell customers how important it is to support local, nonprofessional theater. For the letter content, tell the customers about the Pleasantown Players. Invent any information that adds informative, persuasive facts to your funding request.
c. Type your name in the signature block in the letter.
d. Merge the document Funding Letter and the query you created into a new document named **Pleasantown Letters**.
e. Print the current page of the Pleasantown Letters file.
f. Save your changes to the document, close the document, exit Word, then close the databse and exit Access.